

### **REMARKS**

By this amendment, claims 1, 6, 7, 11, 15, 16, 17, 21 and 26 have been amended, and claims 27-31 have been cancelled. After entry of this amendment, claims 1-26 and claim 32 will be pending.

Applicants appreciate the allowance of claims 21-26.

### **Restriction Requirement**

Applicants appreciate the courtesies extended by Examiner Yang to Applicants' representative during the telephone conference of March 16, 2005. The substance of the interview is summarized in the following remarks.

During the conference, a restriction requirement as set forth in the Office action was discussed and Applicants' representative elected Group I, claims 1-26 and 32. Applicants' affirm this election.

### **Provisional Double Patenting Rejections**

Claims 1-6 and 7-20 of this application have been rejected for conflicting with claims 1-6 and 7-14 of Application No. 10/356,383 and with claims 1 and 2-20 of Application No. 10/356,655.

Claim 1 of the present application is distinct from claim 1 of Application No. 10/356,655 (the '655 Application). For example, claim 1 of the '655 Application recites "a portable electronic key transportable from a key authorization site where the key is authorized to locations of key containers" and "a key tag associated with the vehicle key." These features are not recited in claim 1 of the present application. Also, claim 1 of the present application recites that "information about access events is caused to be stored in the electronic key memory during an access or attempted access for later uploading to a central computer," which is not recited in claims 1, 2 or 20 of the '655 Application.

Claim 7 of the present application is distinct from claim 1 of the '655 Application at least because claim 7 recites that the electronic access device is an "open architecture" device.

Claim 15 of the present application is distinct from claim 15 of the '655 Application at least because claim 15 of the present application recites that the electronic access device is an "open architecture" device.

An "open architecture" device refers to a device that allows any application or user to inspect, add, delete, modify, and duplicate other applications and associated data on the device. The term "open" implies that major components of the system, communication protocols and interfaces are designed according to published standards that allow integration with other systems and components. An "open architecture" electronic access devices is distinguished from electronic access devices having a "closed architecture," such as a simple hand-held calculator, where all the functions are built-in. A portable electronic access device as recited in claims 7 and 15 of the '655 Application can be either an "open architecture" device or a "closed architecture" device. Accordingly, claims 7 and 15 of the present application do not conflict with claims 7 and 15 of the '655 Application.

The claims of the present application are apparatus claims, whereas the claims of Application No. 10/356,383 (the '383 Application) are method claims. Also, claim 1 of the present application recites that "information about access events is caused to be stored in the electronic key memory during an access or attempted access for later uploading to a central computer," which is not recited in claims 1 and 7 of the '383 Application.

Claims 7 and 15 of the present application are distinct from claims 1 and 7 of the '383 Application at least because claims 7 and 15 of the present application recite that the electronic access device is an "open architecture" device.

As mentioned above, an "open architecture" electronic access device is distinguished from an electronic access device having a "closed architecture." Accordingly, claims 7 and 15 of the present application do not conflict with claims 1 and 7 of the '383 Application.

Based on the foregoing, the Applicants respectfully request that the provisional double patenting rejections be withdrawn. However, if the provisional double patenting rejections of the claims of the present application are maintained, Applicants will file Terminal Disclaimers to obviate these rejections.

### **Cancellation of Claims 27-31**

Claims 27-31 were withdrawn from further consideration as a result of the restriction requirement, and thus these claims have been cancelled from this application without prejudice or disclaimer. Applicants reserve all rights to present claims 27-31 and similar claims in a continuing application.

### **Amendment to Claim 11**

Claim 11 is amended to correct a minor editorial error and to provide proper antecedent basis. The recitation of “key tag storage area” has been amended to recite “key set storage area.”

### **Objection to Claims 1, 7, 15-17, 21 and 26**

#### **Claims 1, 7, 17, 21 and 26**

Claims 1, 7, 17, 21 and 26 are objected to because these claims have the phrases “capable of” or “being capable of.”

Applicants have amended claims 1, 7, 17, 21 and 26 to omit the phrases “capable of” or “being capable of” and replaced those phrases with “operable to.” These amendments do not narrow the respective literal scopes of claims 1, 7, 17, 21, 26 and any dependent claims.

#### **Claims 15 and 16**

Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but are indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and a terminal disclaimer is filed to overcome the double patenting rejection of the base claim.

Applicants have rewritten claim 15 in independent form to include all of the limitations of base claim 7.

Also, as discussed above, the provisional double patenting rejection of claim 15 should be withdrawn.

Accordingly, Applicants submit that claims 15 and 16, claim 16 being directly dependent from claim 15, are in a condition for allowance.

**Rejection of Claims 1, 2 and 32 Under 35 U.S.C. § 102(e)**

The Office action rejects claims 1, 2 and 32 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,611,232 (“Wunderlich”). This rejection is respectfully traversed.

**Claims 1 and 2**

As amended, independent claim 1 is directed to a “key management system for controlling access to a vehicle key stored proximal to a remotely located vehicle” that includes, in part, “an electronic key for accessing [a] key container” where “the electronic key is operable to establish a wireless communications link with [an] electronic lock of the key container and ha[s] a memory.”

Wunderlich does not teach each and every feature recited in claim 1. More specifically, Wunderlich does not teach an electronic key that establishes a wireless communications link with an electronic lock of a key container and has a memory. The Examiner suggests that an IR transmitter disclosed in Wunderlich is an electronic key having an identification code stored in a memory and a transmitter for accessing a key box via a wireless link. Assuming the Examiner is referring to transmitter 280 disclosed in Wunderlich, the transmitter 280 does not establish a wireless communication link with an electronic lock, but instead establishes communication with receiving stations 150 which cover the vehicle lot. *See* Wunderlich, col. 4, lines 36-43. The receiving stations are not electronic locks as recited in claim 1 and therefore the transmitter of Wunderlich is not in communication with an electronic lock.

Further, the transmitter 280 of Wunderlich does not include a memory. The memory disclosed in Wunderlich is local memory 550 included with a locator unit 220, which is included in a lock box unit 110. *See* Wunderlich, col. 6, lines 18-21. Wunderlich makes no mention that the transmitter 280 also includes a memory and therefore Examiner’s contention that the transmitter includes a memory is misplaced.

For at least these reasons, Wunderlich does not teach each and every feature recited in independent claim 1 and therefore does not anticipate claim 1. Accordingly, withdrawal of the rejection as to claim 1 is respectfully requested.

Claim 2, being directly dependent from base claim 1, is allowable for at least the same reasons, as well as for the respective additional features recited therein. Therefore, withdrawal of the rejection as to claim 2 is respectfully requested.

## **Claim 32**

Independent claim 32 is directed to a decentralized key management system for controlling access to multiple vehicles among multiple users that includes, in part, “electronic access devices for assignment to the users and operable to unlock key containers if authorized.”

Similar to the reasoning in favor of allowance of independent claim 1 discussed above, independent claim 32 is allowable because Wunderlich does not teach an electronic access device as recited in claim 32. The Examiner erroneously suggests that the IR transmitter of Wunderlich is an electronic access device. As mentioned above, the IR transmitters are located in a lock box unit, which is assigned to a particular vehicle and not to a particular user as recited in claim 32. Further, the transmitters merely transmit signals to receiving stations, which in turn transmit the signals to a base station. In other words, the transmitters do not communicate with, e.g., send signals to, the lock box unit and therefore are not operable to unlock key containers as recited in claim 32. Finally, the IR transmitters of Wunderlich do not accept a user’s identification, but simply transmit signals to receiving stations, and therefore, need not be programmable as the Examiner suggests.

For at least these reasons, Wunderlich does not teach each and every feature recited in independent claim 32 and therefore does not anticipate claim 1. Accordingly, withdrawal of the rejection as to claim 32 is respectfully requested.

## **Rejection of Claims 1-5 Under 35 U.S.C. § 102(e)**

The Office action rejects claims 1-5 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0179075 (“Greenman”). This rejection is respectfully traversed.

As amended, independent claim 1 is directed to “a key management system for controlling access to a vehicle key stored proximal to a remotely located vehicle” that includes, in part, “an electronic key for accessing [a] key container” where “information about access events is caused to be stored in the electronic key memory during an access or an attempted access for later uploading to a central computer.”

Greenman does not teach each and every feature recited in claim 1. More specifically, Greenman does not teach storing information about access events in an electronic key memory

during an access event or an attempted access. To the extent the external devices of Greenman have a memory, the memory is merely used for storing access codes and not for storing information about access events. *See* Greenman, pg. 4, paragraph [0061]. Further, the access codes are stored in the external devices of Greenman prior to accessing the lock and not during the access event or attempted access. *Id.*

Additionally, Greenman does not teach storing information in an electronic key memory for later uploading to a central station. The access codes stored in the external devices of Greenman are not uploaded to a central computer but are only used to access a site. *See* Greenman, pg. 4, paragraph [0061].

For at least these reasons, Greenman does not teach each and every feature recited in independent claim 1 and therefore does not anticipate claim 1. Accordingly, withdrawal of the rejection as to claim 1 is respectfully requested.

Claims 2-5, being dependent from base claim 1, either directly or indirectly, are allowable for at least the same reasons, as well as for the respective additional features recited therein. Therefore, withdrawal of the rejection as to claims 2-5 is respectfully requested.

#### **Rejection of Claim 6 Under 35 U.S.C. § 103(a)**

The Office action rejects claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Wunderlich or Greenman as applied to claim 1, and further in view of U.S. Patent No. 6,131,808 (“Pires”). This rejection is respectfully traversed.

As amended, dependent claim 6 is directed to “a key management system for controlling access to a vehicle key stored proximal to a remotely located vehicle” that comprises a “key tag associated with the vehicle key” where “the key tag [has] an electronically stored identifier and being detectible by the key container via a wireless communications link.” Wunderlich, or Greenman, and Pires fail to teach or suggest, individually or in combination, such a key management system.

Pires does not provide for the deficiencies in Wunderlich and/or Greenman as noted above. Moreover, Pires does not teach or suggest a key tag having an electronically stored identifier that is detectible by a key container via a wireless communications link. The identification device in Pires requires electrical contact between the electronic memory device and the receptacle or station to enable communication between the identification device and the

storage system. *See* Pires, col. 5, lines 32-37. Accordingly, the identification device in Pires does not communicate wirelessly with the storage system.

Because the applied combination of references fails to teach or suggest each and every feature of claim 6, claim 6 would not have been obvious and this rejection should be withdrawn.

**Rejection of Claims 7-13 and 17-20 Under 35 U.S.C. § 103(a)**

The Office action rejects claims 7-13 and 17-20 under 35 U.S.C. § 103(a) as being unpatentable over Greenman in view of Pires and U.S. Patent No. 5,280,518 (“Danler”). This rejection is respectfully traversed.

**Claims 7-10, 12, 13, 19 and 20**

Independent claim 7 is directed to a key management system for controlling access to vehicle keys that comprises “an open architecture electronic access device carried by a user to access [a] key container” where “the access device [has] a memory that is updated with at least [an] identifier of [a] key tag when the key container is successfully accessed and [a] key set is removed from [a] key set storage area.” Greenman, Pires and Danler, whether alone or in combination, fail to teach or suggest such a key management system.

More specifically, the applied combination of references does not teach an access device that has a memory that is updated with at least an identifier of a key tag when the key container is successfully accessed and a key set is removed from a key set storage area.

The Office action states that Danler teaches an electronic key 14 that has a memory 148 “that is updated with lock box 12’s identifier when the key container 64 is successfully accessed. *See* p.12 of the Office action. Assuming, without concession, that Danler teaches an electronic access device having a memory that updates a lock box’s identifier when the key container is successfully accessed as suggested by the Examiner, Danler does not teach a key set that includes “a vehicle key to a particular vehicle and a key tag associated with the vehicle key...the key tag having an electronically readable identifier stored thereon” as recited in claim 7. Danler, if anything, merely teaches identification of a lock box, which is different from identification of a key tag associated with a vehicle key. Updating an electronic access device with the identification of a particular vehicle key using a key tag identifier provides particular benefits over updating an electronic key with identification of just a lock box.

Further, Danler does not teach updating a memory in an electronic access device when the key container is successfully accessed and the key set is removed from the key set storage area. In other words, Danler is merely capable of recognizing whether the lock box key container is opened or closed and is not capable of recognizing whether a specific key set stored in the lock box is present or has been removed.

Greenman and Pires, alone or in combination, fail to overcome the deficiencies of Danler.

For at least the foregoing reasons, the applied combination of references does not teach or suggest each and every feature of claim 7. Accordingly, withdrawal of the rejection as to claim 7 is respectfully requested.

Claims 8-10, 12, 13, 19 and 20, being dependent from base claim 7, either directly or indirectly, are allowable for at least the same reasons, as well as for the respective additional features recited therein. Therefore, withdrawal of the rejection as to claims 8-10, 12, 13, 19 and 20 is respectfully requested.

#### **Claim 11**

As amended, dependent claim 11 is directed to a key management system for controlling access to vehicle keys where “the memory of the access device records the approximate time that the key tag was returned to the key set storage area.” Greenman, Pires and Danler fail to teach or suggest, individually or in combination, the key management system recited in claim 11.

Following the same reasoning discussed above for allowance of claim 7, Danler is merely capable of recognizing whether the lock box key container is opened or closed and is not capable of recognizing whether a specific key set stored in the lock box is present or has been removed. Therefore, Danler fails to teach or suggest, alone or in combination with the other applied references, recording the approximate time the *key tag* was returned to the key set storage area of a key container in the memory of the access device. Further, Greenman and Pires fail to overcome the deficiencies of Danler.

For at least the foregoing reasons, the applied combination of references does not teach or suggest each and every feature of claim 11. Accordingly, withdrawal of the rejection as to claim 11 is respectfully requested.

#### **Claim 18**

Claim 18 is directed to a key management system where “the key container and access device are each programmed to participate in a challenge response exchange with each other



during user attempts to access the key container.” Greenman, Pires and Danler fail to teach or suggest, individually or in combination, the key management system recited in claim 18.

More specifically, the applied combination of references fails to teach or suggest a challenge response exchange between the key container and access device during user attempts to access the key container. The Office action summarily states that Greenman discloses a lock 101 and PDA or cell phone participating in a challenge response exchange when a user attempts to access lock 101. *See* page 11 of the Office action. However, Greenman makes no mention of a challenge response between the lock 101 and a PDA or cell phone. Instead, Greenman teaches external devices that communicate with the lock during access attempts only through a user inputted access code. *See* Greenman, page 4, paragraphs [0061] and [0068]. Inputting an access code into a lock using a PDA or cell phone as disclosed in Greenman is not a challenge-response exchange between the key container and access device.

For at least the above reasons, the applied combination of references does not teach or suggest each and every feature of claim 18. Accordingly, withdrawal of the rejection as to claim 18 is respectfully requested.

**Rejection of Claim 14 Under 35 U.S.C. § 103(a)**

The Office action rejects claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Greenman in view of Pires and Danler and further in view of U.S. Patent No. 5,801,628 (“Maloney”). This rejection is respectfully traversed.

As discussed above, independent claim 7 would not have been obvious in view of the applied combination of Greenman, Pires and Danler for at least those reasons expressed above. Consequently, claim 14, being directly dependent from claim 7, would also not have been obvious in view of the same combination of references for at least the same reasons, as well as for the respective additional features recited therein.

Maloney does not overcome the deficiencies of the combination of Greenman, Pires and Danler. Therefore, claim 14 is allowable over Greenman, Pires, Danler and Maloney.

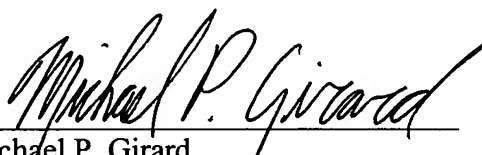
Accordingly, withdrawal of the rejection as to claim 14 is respectfully requested.

**CONCLUSION**

Based on the foregoing, Applicants respectfully submit that the claims are drawn to allowable subject matter and that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place this application in better condition for allowance, the Examiner is requested to contact Applicants' representative by telephone.

Respectfully submitted,

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